UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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April 14, 2003

Mr. Tom Wood
Libby Volunteer Fire Department
Libby, MT 59923

Dear Mr. Wood:

Thank you for your letter to EPA regarding vermiculite insulation and the safety of your firefighters. How to deal with vermiculite insulation is a difficult issue and answers are often not simple and well-established. In your letter, you raised a number of direct and indirect concerns which I'll attempt to address separately. This letter is a follow up to our meeting on April 10th, 2003 in Libby.

1. Does EPA have information regarding which properties in the area have vermiculite insulation? Can EPA share this information with the fire department?

EPA does have this information for the properties we have inspected. We have not inspected all properties in the area - some property owners denied access, some we have not yet visited, and some were outside our initial site boundary. When results are compiled in a useable format, EPA will share our information with the fire department. We request that this information not be disseminated publicly and only be used to support the fire department's mission and safety. In the future, as cleanup progresses, EPA hopes to compile a GIS database with information regarding (1) whether and how a property was inspected or sampled by EPA, (2) the results of those inspections, (3) if cleanup was necessary, (4) if cleanup occurred, and (5) any significant contamination EPA did not remove, such as in walls. How this database is constructed, but more importantly how it will be used and who will have access to it, has not yet been decided.

2. What risk is posed to firefighters addressing homes with vermiculite insulation? Should we be concerned?

This is a difficult question to answer. The risk depends on the duration and frequency of exposure, the amount of material disturbed, and the concentration of asbestos during exposure. All of these can vary considerably from case to case. For instance, fighting a fire from a distance at a building with vermiculite insulation is likely to present no appreciable risk, while knocking down a wall with vermiculite insulation may present some. Generally, risk from short-term exposure to low levels of asbestos is very low. However, if exposure occurs more frequently, or if there are very high concentration levels, then the risk obviously increases. Exactly how much is too much is a question we just don't know the answer to.

It is helpful to put these risks in context. Firefighters face a large amount of risk during most response actions. Routinely, you face exposure to fire, smoke, accident, and an almost unlimited amount other hazardous substances. I would certainly assert that these other risks are of far more consequence than exposure to asbestos. These things can cause acute problems immediately, even death. You are aware of these risks and take prudent actions to counter them. Not to diminish the issue, but when we consider risk from asbestos, we are often talking in terms of increasing your long-term risk of cancer or asbestosis from one in a million to one in a hundred thousand or one in ten thousand.

Vermiculite insulation aside, many older homes in Libby and across the country have asbestos containing construction materials, such as pipe wrap, floor tiles, or ceiling tiles. There is no way to identify all of these materials, and while this type of material is generally less toxic than Libby asbestos found in Libby vermiculite, it still poses a cancer risk. You are just as likely to encounter this material today in Libby as you are to encounter vermiculite containing insulation, perhaps more so, and more likely to encounter it after our cleanup of insulation is complete. My point is that vermiculite insulation, while certainly worthy of concern and something we know is present, is not unique in posing a risk to firefighters or homeowners.

3. What measures can we take to address this risk? Does EPA have funds to help?

The risks presented by a fire greatly outweigh those presented by asbestos during the fighting of a fire. There should be absolutely no hesitation to aggressively fight a fire at a property with vermiculite insulation - in Libby, or anywhere else. However, given that there is the possibility of some risk, and armed with knowledge in advance, there are a few things that can be done to minimize or eliminate any risk associated with vermiculite insulation.

- Information. As soon as it is compiled, EPA will provide addresses so you can be aware of potential issues in advance.
- Use of respirators in certain situations. HEPA cartridges for respirators are relatively inexpensive and very effective. During entries, demolition, or other activities where exposure to vermiculite insulation or other asbestos containing materials is likely, it would generally be wise to use HEPA respirators to protect against asbestos and other particulates.
- Watering materials down reduces release of asbestos into the air.

We would be glad to discuss EPA providing HEPA filters for your firefighters, but we cannot provide any additional special equipment.

4. Should we be concerned with release of asbestos during a fire? What sort of decon steps are recommended following potential exposures?

Again, during a fire, release of asbestos to either the building or the surrounding area is the probably the last thing that would concern me. The amount of asbestos released to the surrounding air under any scenario would likely be low, would not last for long, and would not pose a significant loading source to surrounding soils. Again, to put the issue in context, the

majority of properties in Libby have no detectable asbestos in their soil - even after decades of ambient air problems.

Within the building, there is cause for concern after the fire is dealt with. If disposal of materials is required, there may be a requirement for disposal in an asbestos landfill, although generally vermiculite insulation does not meet the current regulatory requirement for an "asbestos containing material." The home may require cleaning. The bottom line is that if a fire occurs during EPA's cleanup, we will work with the property owner to respond. If it occurs after our cleanup is complete, we are currently beginning on a long-term management plan to address this and other issues.

Decontamination procedures can be handled practically and are ultimately up to the fire department, but I think this issue can be handled practically without overreacting. Response areas do not need to be treated as a hazardous materials incident. Here are a few practical steps that can be taken as part of any decon plan:

- Minimize cross contamination. Don't take materials to clean areas before they are cleaned.
- Washing fabrics as normal is effective at removing asbestos.
- Wet wiping or hosing down equipment, either directly after exposure or on an ongoing basis, is generally enough. Dispose of rags in the trash, and flush water down the drain.
- A HEPA vacuum is very effective at removing asbestos and the filters can be disposed of in the trash. EPA is providing HEPA vacuums to all properties undergoing cleanup in Libby and will provide one for the fire department as well. Periodic or frequent use of this in the common room would give me a high degree of comfort that ongoing exposure was not a problem.

EPA is also willing to collect dust samples from any areas of concern at your facilities now and in the future to determine if contamination is a current or ongoing problem. Special ventilation is probably not required. We can discuss these items with you also.

I hope this answers some of your questions. If you have any additional questions, please contact the EPA Information Center at 293-6194.

Sincerely,

Jim Christiansen
Remedial Project Manager